

# Comparisons of Job Characteristics

**Focus Occupation:** [Machinists \(51-4041\)](#)

**Associated Occupation:** [Tool Grinders, Filers, and Sharpeners \(51-4194\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 94

**Focus Occupation:** Machinists (51-4041)

**Associated Occupation:** Tool Grinders, Filers, and Sharpeners (51-4194)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Mechanical	6.8	12.6	18.0	>> Current knowledge level is likely more than sufficient
Production and Processing	6.0	11.1	12.7	> Current knowledge level is likely sufficient
Engineering and Technology	5.7	7.9	10.2	> Current knowledge level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 85

**Focus Occupation:** Machinists (51-4041)

**Associated Occupation:** Tool Grinders, Filers, and Sharpeners (51-4194)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Operation Monitoring	6.6	12.9	12.0	0 Current skill level may be sufficient
Equipment Maintenance	3.5	11.1	9.3	< A higher skill level may be required
Operation and Control	5.4	11.1	11.1	0 Current skill level may be sufficient
Quality Control Analysis	5.9	10.8	12.6	> Skill level is likely sufficient
Repairing	3.4	10.6	8.5	< A higher skill level may be required
Mathematics	6.2	9.7	8.5	< A higher skill level may be required
Troubleshooting	4.5	9.2	10.2	> Skill level is likely sufficient
Equipment Selection	3.3	8.6	8.6	0 Current skill level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 91

Focus Occupation: Machinists (51-4041)

Associated Occupation: Tool Grinders, Filers, and Sharpeners (51-4194)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Manual Dexterity	6.5	12.8	11.1	<	Some improvement in abilities may be required
Finger Dexterity	7.6	12.7	11.6	0	Current ability level may be sufficient
Control Precision	6.6	12.3	13.3	0	Current ability level may be sufficient
Arm-Hand Steadiness	6.8	11.8	11.0	0	Current ability level may be sufficient
Visualization	7.5	11.1	10.1	0	Current ability level may be sufficient
Perceptual Speed	7.4	11.0	9.9	<	Some improvement in abilities may be required
Selective Attention	8.7	10.8	9.7	<	Some improvement in abilities may be required
Reaction Time	4.8	10.4	10.1	0	Current ability level may be sufficient
Hearing Sensitivity	5.6	9.1	9.3	0	Current ability level may be sufficient
Rate Control	3.8	9.1	8.6	0	Current ability level may be sufficient
Wrist-Finger Speed	3.2	6.6	7.3	>	Current ability level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 97

Focus Occupation: Machinists (51-4041)

Associated Occupation: Tool Grinders, Filers, and Sharpeners (51-4194)

Work Activities	Exclusivity of Activity
Adjust production equipment/machinery setup	25
Examine products or work to verify conformance to specifications	15
Fabricate, assemble, or disassemble manufactured products by hand	11
Identify base metals for welding	68
Load or unload material or workpiece into machinery	34
Maintain or repair industrial or related equipment/machinery	39
Monitor production machinery/equipment operation to detect problems	27
Move or fit heavy objects	8
Operate metal or plastic fabricating equipment/machinery	54
Perform safety inspections in manufacturing or industrial setting	33
Read blueprints	10
Read specifications	23
Read technical drawings	7
Recognize characteristics of alloys	71
Recognize characteristics of metals	62
Set up production equipment or machinery	51

Understand machine setup instructions	74
Understand technical operating, service or repair manuals	6
Use arc welding equipment	62
Use hand or power tools	2
Use precision measuring tools or equipment	17
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: n/a

**Focus Occupation: Machinists (51-4041)**

**Associated Occupation: Tool Grinders, Filers, and Sharpeners (51-4194)**

Tools and Technologies	Exclusivity
Tools and technology data is unavailable for one or both occupations.	

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.